member selected from the group consisting of cyclodextrin and derivatives thereof, whereby micelles of HDL and VLDL cholesterol are formed in said micelle layer;

a hydrophobic barrier in fluid communication with said micelle layer, said hydrophobic barrier substantially trapping therein the micelles of HDL and VLDL cholesterol formed in said micelle layer; and

a reaction layer in fluid communication with said hydrophobic barrier, said reaction layer containing a cholesterol determining agent, whereby the cholesterol measurement obtained in said reaction layer substantially corresponds to the concentration of LDL cholesterol in the sample.

2. The apparatus of claim 1, wherein at least one of said cyclodextrin and derivatives thereof is selected from the group consisting of alkyl betaine derivatives, sulfobetaine derivatives, aminocarboxylic acid derivatives, imidazoline derivatives, amino oxide and ethoxylated acetylene derivatives.

3. The apparatus of claim 1, wherein said non-ionic surfactant comprises at least one compound selected from the group consisting of an aminocarboxylic acid derivative, lauric acid amidopropyl betaine, a 2-alkyl-N-carboxymethyl-N-hydroxyethyl imidazolium betaine lauryl betaine, sodium N-lauryl-N-methyl-beta-alanine and N-octyl-N,N-dimethyl-3-amminio-1-propanesulfonic acid.

4. The apparatus of claim 1, wherein said cyclodextrin and derivatives thereof is poly-beta-cyclodextrin.

5. The apparatus of claim 1, wherein at least one of said cyclodextrin and derivatives thereof is selected from the group consisting of dimethyl-alpha-cyclodextrin and poly-beta-cyclodextrin.

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6 8. The apparatus of claim 1, wherein said hydrophobic barrier comprises an asymmetric membrane.

7 7. The apparatus of claim 6, wherein said hydrophobic barrier is coated with casein.

8 8. The apparatus of claim 1, wherein said hydrophobic barrier is coated with casein.

9 9. The apparatus of claim 1, wherein said hydrophobic barrier comprises a polyether sulphone membrane.

10 10. The apparatus of claim 1, wherein said hydrophobic barrier includes at least one compound selected from the group consisting of sorbitol, sucrose and tween 20.

11 11. A method of determining concentration of LDL cholesterol in a whole blood sample, said method comprising:

(a) contacting the whole blood sample with a first layer, separating blood cells from plasma in the first layer and passing the plasma therethrough;

(b) contacting the plasma which passed through the first layer with a second layer, forming micelles of HDL and VLDL but not LDL cholesterol in the second layer and passing the plasma including micelles through the second layer;

(c) contacting the plasma containing the micelles with a third layer and trapping the micelles in the third layer while passing the plasma now substantially devoid of HDL and VLDL cholesterol therethrough; and

(d) contacting the plasma now substantially devoid of HDL and VLDL cholesterol with a fourth layer that has been incorporated with a cholesterol determining agent, whereby the cholesterol measurement

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obtained in the fourth layer substantially corresponds to the concentration of LDL cholesterol in the sample.

12. The method of claim 11, further comprising prior to step (a) treating the second layer with a non-ionic surfactant and at least one member selected from the group consisting of cyclodextrin and derivatives thereof.

13. The method of claim 11, further comprising prior to step (a) coating the third layer with casein.

14. The method of claim 11, further comprising prior to step (a) selecting a polyether sulphone membrane for the third layer.

15. The method of claim 11, further comprising prior to step (a) selecting an asymmetric membrane for the third layer.

16. A method of determining cholesterol concentration in a whole blood sample, said method comprising:

(a) contacting the whole blood sample with a first layer, separating blood cells from plasma in the first layer and passing the plasma therethrough; and

(b) contacting the plasma obtained in step (a) with a reaction layer incorporated with a cholesterol determining agent and CHAPS.

17. The method of claim 16, further comprising prior to step (b), incorporating MES buffer in the cholesterol determining agent.

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